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(71) Applicants (for all designated States except US): CHIRON CORPORATION [US/US]; 4560 Horton Street, Emeryville, CA 94608 (US). HYSEQ INC. [US/US]; 675 Almanor Avenue, Sunnyvale, CA 94086 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): WILLIAMS, Lewis, T. [US/US]; 3 Miroflores, Tiburon, CA 94920 (US). ESCOBEDO, Jaime [CL/US]; 1470 Lavorna Road, Alamo, CA 94507 (US). INNIS, Michael, A. [US/US]; 315 Constance Place, Moraga, CA 94556 (US). GARCIA, Pablo, Dominguez [CL/US]; 882 Chenery Street, San Francisco, CA 94131 (US). SUDDUTH-KLINGER, Julie [US/US]; 280 Lexington Road, Kensington, CA 94707 (US). REINHARD, Christoph [DE/US]; 1633 Clinton Avenue, Alameda, CA 94501 (US). GIESE, Klause [DE/US]; 1009 Carolina Street, San Francisco, CA 94107 (US). RANDAZZO, Filippo [US/US]; 6363 Christie Avenue #2511, Emeryville, CA 94608 (US). KENNEDY, Giulia, C. [US/US]; 360 Castenada Avenue, San Francisco, CA 94116 (US). POT, David [CA/US]; 1565 5th Avenue #102, San Francisco, CA 94112 (US). KASSAM, Altaf [US/US]; 394 49th Street, Oakland, CA 94609 (US). LAMSON, George [US/US]; 232 Sandringham Drive, Moraga, CA 94556 (US). DRMANAC, Radoje [YU/US]; 850 East Greenwich Place, Palo Alto, CA 94303 (US). CRKVENJAKOV, Radomir [YU/US]; 762 Haverhill Drive, Sunnyvale, CA 94068 (US). DICKSON, Mark [US/US]; 1411 Gabilan Drive #B, Hollister, CA 95025 (US). DRMANAC, Snezana [YU/US]; 850 East Greenwich Place, Palo Alto, CA 94303 (US). LABAT, Ivan [YU/US]; 140 Acalanes Drive, Sunnyvale, CA 94086 (US). LESHKOWITZ, Dena [US/US]; 678 Durshire Way, Sunnyvale, CA 94087 (US). KITA, David [US/US]; 899 Bounty Drive, Foster City, CA 94404 (US). GARCIA, Veronica [ES/US]; 911 Shell Boulevard #102-0, Foster City, CA 96606 (US). JONES, William, Lee [US/US]; 4290 Albany Drive #P-146, San Jose, CA 95129 (US). STACHE-CRAIN, Birjit [DE/US]; 345 South Mary Avenue, Sunnyvale, CA 94086 (US).

- (74) Agent: BLACKBURN, Robert, P.; Chiron Corporation, P.O. Box 8097, Emeryville, CA 94662-8097 (US).
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(54) Title: HUMAN GENES AND GENE EXPRESSION PRODUCTS II

(57) Abstract

This invention relates to novel human polynucleotides and variants thereof, their encoded polypeptides and variants thereof, to genes corresponding to these polynucleotides and to proteins expressed by the genes. The invention also relates to diagnostic and therapeutic agents employing such novel human polynucleotides, their corresponding genes or gene products, e.g., these genes and proteins, including probes, antisense constructs, and antibodies.



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The present invention describes a library of human polynucleotides comprising the sequences given in AA21253 to AA217779. Also described is a method of detecting differentially expressed genes correlated with the cancerous state of a mammalian cell, comprising detecting at least one differentially expressed gene product in a test sample from a cell suspected of being cancerous, where the gene product is encoded by one of the 5248 polynucleotide sequences given in AAZ12532 to AAZ17779. The AAGAAATTTAGTTATAACTCTATGTAGTTATAGAAAGTGAATATGCAGTTATTCTATGAG 1953 TCGCACAATTCTTGAGTCTCTGATACCTACCTATTGGGGTTAGGAGAAAAGACTAGACAA 2013 TCGCACAATTCTTGAGTCTCTGATACCTACCTATTGGGGTTAGGAGAAAAGACTAGACAA 1847 TTACTATGTGGCTCATTCTCTACAACATATGTTAGCACGGCAAAGAACCTTCAAATTGAAG 2073 AAGAAATTTAGTTATAACTCTATGTAGTTATAGAAAGTGAATATGCAGTTATTCTATGAG 1787 Human, gene; gene expression product; diagnosis; therapy; probe;
detection; mapping; tissue typing; profiling; forensic; cancer;
genetic analysis; colorectal cancer; breast cancer; lung cancer; ss. Human gene expression product cDNA sequence SEQ ID NO:3998. Crkvenjakov R, Dickson M, Drmanac R, Drmanac S; Escobedo J, Garcia PD, Garcia V, Giese K, Innis MA; Jones WL, Kässam A, Kennedy GC, Rita D, Labat I; Lamson G, Leshkowitz D, Pct D, Randazzo F, Reinhard C; Stache-Crain B, Sudduth-Klinger J, Williams LT; Novel human genes and their expression products which are differentially expressed in different cell types 2074 ACTGAGATTTTCTGTATATATGGGTTTTG 2103 1908 ACTGAGATTTTCTGTATATATGGGTTTTG 1937 Claim 1; Page 1897; 2479pg; English. AA216528 standard; cDNA; 772 BP 98US-0072910, 98US-0075954, 98US-0080114, 98US-0080515, 98US-0080666 99WO-US01619 12-OCT-1999 (first entry) CHIR) CHIRON CORP. WPI; 1999-494092/41. (HYSE-) HYSEQ INC. WO9938972-A2. 28-JAN-1998; 24-FEB-1998; 31-MAR-1998; Homo sapiens 28-JAN-1999; 05-AUG-1999. 03-APR-1998; 03-APR-1998; 1894 1954 1788 2014 1728 RESULT 5 q g Q ŏ δ g ŏ ò

ö polynucleotides can be used as a source of primers and probes, which can be used for a variety of purpose, e.g. detection of expression levels, mapping, tissue typing or profiling, forensics, genetic analysis and detection of polymorphisms. Polypeptides encoded by the polynucleotides can be used for raising antibodies for experimental, diagnostic and rarays for diagnostics (which may be used to determine function of a may so for diagnostics (which may be used to determine function of an encoded protein); and to detect differences in expression levels between two cells (e.g. to identify abnormal or diseased tissue in a human, to identify a genetic predisposition or susceptibility to a disease such as cancer; The polynucleotides of the invention are especially used in the diagnosis, prognosis and management of colorectal cancer, breast cancer, and lung cancer. The polynucleotides can also be used to screen for 1099 ACCATTAATGCTGAGGAGCTGCTGCTTTCAAATGCAGTGGCAGTGACCTTTTCTGAGCGG 1158 1159 CTACTGGGAAATTCTCATTAGCAGTTCCGATCTTTGTTGCCCTCTCCTGCTTTGGCTCC 1218 1279 CTTCCAGAAATCCTCTCCATGATTCATGTCCGCAAGCACACTCCTCTACCAGCTGTTATT 1338 1339 GTTTTGCACCCTTTGACAATGATAGTGCTCTTCTCTGGAGACCTCGACAGTCTTTTGAAT 1398 1399 TTCCTCAGTTTTGCCAGGTGGCTTTTTATTGGGCTGGCAGTTGCTGGGCTGATTTATCTT 1458 90 ACCATTAATGCTGAGGAGCTGCTGCTTTCAAATGCAGTGGCAGTGACCTTTTCTGAGCG 149 390 TICCICAGITITGCCAGGIGGCITITITATIGGGCTGGCAGTIGCTGGGCTGAITTATCII 449 Gaps Human; gene; gene expression product; diagnosis; therapy; probe; detection; mapping; tissue typing; profiling; forensic; cancer; genetic analysis; colorectal cancer; breast cancer; lung cancer; ss. 1219 ATGAACGGTGGTGTTTGCTGTCTCCAGGTTATTCTATGTTGCGTCTCGAGAGGGTCAC 1459 CGATACAAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCACTGTTCATCCCA 1512 450 CGATACAAATGCCCAGATATGCATCGTCCTTTCAAGGTGCCACTGTTCATCCCA 503 ö Query Match 18.5%; Score 414; DB 20; Length 772; Best Local Similarity 100.0%; Pred. No. 3.7e-163; Matches 414; Conservative 0; Mismatches 0; Indels (Human gene expression product cDNA sequence SEQ ID NO:2449. Sequence 772 BP; 175 A; 183 C; 158 G; 248 T; 8 other; peptide analogues and antagonists. AA214980 standard; cDNA; 300 BP. 12-OCT-1999 (first entry) Homo sapiens. WO9938972-A2 AAZ14980; Query Match RESULT 6 AA214980 g ò q ò g δ q ò g ò g Óγ

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